

VIII. OPHIDIA FROM SOUTH AMERICA IN THE CARNEGIE MUSEUM: A CRITIQUE OF DR. L. E. GRIFFIN'S "CATALOG OF THE OPHIDIA FROM SOUTH AMERICA AT PRESENT (JUNE, 1916) CONTAINED IN THE CARNEGIE MUSEUM."¹

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In 1916 Dr. L. E. Griffin published in the Memoirs of the Carnegie Museum an extensive paper on the South American Snakes contained in that Museum. In the summer of the year 1924 I visited the Carnegie Museum and was given permission by Dr. Douglas Stewart, the Director, to make a thorough study of the material upon which Dr. Griffin had founded his paper. At the outset I wish to express to Dr. Stewart as well as to Dr. Arthur W. Henn, the Curator in charge of the collection, my sincere thanks for the courtesies extended to me upon the occasion of my visit to Pittsburgh.

Dr. Griffin in his paper lists eighty-eight species of snakes from South America, of which number he describes ten as new to science. I had the privilege of examining every specimen listed by Dr. Griffin, and I made a careful study of all of them, especially the types of the species named by Dr. Griffin. In the following notes I take up first the identifications made by Griffin of species named by others, in which it seems to me that in a few cases he has fallen into error, and secondly the species, which he has described as new.

I.

Griffin's Species No. 15, *Elaphe dichroa* (Peters).

(Mem. Car. Mus., VII, p. 174.)

In this case I am convinced that we are dealing with a young specimen of *Drymobius bifossatus* (Raddi). Dr. Griffin correctly identified two adult specimens of *Drymobius bifossatus*, as may be seen at p. 176 of his Memoir, but in the case of the specimen, bearing the Catalog No. 329, he has, I think, fallen into error.

¹Memoirs Carn. Mus., VII, No. 3, Nov., 1916, pp. 163-278, pl. XXVIII.

Griffin's Species No. 33, **Liophis albiventris** (Jan).

(Mem. Car. Mus. VII, p. 187.)

Boulenger (Ann. Mag. Nat. Hist. (8) I, 1908, p. 115) a few years before Dr. Griffin wrote his paper, showed that *Liophis albiventris* (Boulenger, Cat. Snakes B. M., II, 1894, p. 130) is strictly synonymous with *L. tæniurus*, which must be placed in the genus *Aporophis*. Accordingly the specimen in the Carnegie Museum, Cat. No. 278, must be identified as *Aporophis tæniura* (Tschudi).

Griffin's Species No. 83, **Lachesis lanceolatus** (Lacépède).

Mem. Car. Mus. VII, p. 222.

I have recently shown (Amer. Jour. Trop. Med., IV, 1924, p. 448, and Contrib. Harvard Inst. Trop. Biol. & Med., II, 1925, p. 26) that *Lachesis lanceolatus* as used by Boulenger (Cat. Snakes B. M., III, 1896, p. 535) is a composite of *Bothrops atrox* (Linnæus, 1758), *Bothrops jararaca* (Wied, 1824), and *Bothrops jararacussu* Lacerda, 1884.

The specimens, which Griffin identified as *L. lanceolatus* undoubtedly belong to the following species:

- a. *Bothrops atrox* (Linnæus): specimens Nos. 159, 244, 245, 247, 248, 249, 250, 253, 254, 255, 257, 258, 313, 372, and 2019.
- b. *Bothrops jararacussu* Lacerda: specimens Nos. 43 and 121.
- c. *Bothrops jararaca* Wied: specimens Nos. 246 and 252.²
- d. *Bothrops chloromelas* (Boulenger): specimen No. 373.³

Griffin's Species No. 87, **Lachesis peruvianus** Boulenger.

Mem. Car. Mus., VII, p. 226.

As shown in Footnote 3, this is *Bothrops chrysomelas* (Boulenger).

It may be proper to call attention to the fact that the common Brazilian names "Sucury" and "Sucurujuba" (not "Sucurujaba") do not apply to the species *Dimades plicatilis* (Linnæus), as erroneously stated by Mr. J. D. Haseman (See p. 175 of Griffin's paper) but to the Anaconda, *Eunectes murinus* (Linnæus).

²Specimen No. 252 is said to have come from Peru, which seems to me quite improbable, inasmuch as this species seems not to occur in that country.

³On page 223 of Griffin's paper this specimen is listed under *Lachesis lanceolatus*, while on page 226 it appears as *Lachesis peruvianus*. As a matter of fact it does not belong to either of these species, but to *Bothrops chloromelas* (Boulenger).

II.

Dr. Griffin describes ten species of snakes in the Carnegie Museum as new to science. They are the following:

No. 1, *Helminthophis bondensis*, p. 165; No. 11, *Aporophis melanocephalus*, p. 171; No. 13, *Atractus tæniatus*, p. 173; No. 35, *Liophis elæoides*, p. 187; No. 46, *Rhadinæa orina*, p. 195; No. 48, *Tropidodipsas spilogaster*, p. 197; No. 56, *Clelia euprepa*, p. 203; No. 57, *Clelia peruviana*, p. 204; No. 75, *Elaps colombianus*, p. 216; No. 77, *Elaps hollandi*, p. 218.

Having critically examined the types of all these species, I have found only the following to be valid:

No. 1, *Helminthophis bondensis*, type from Bonda, Colombia;⁴
 No. 11, *Aporophis melanocephalus*, type from Las Juntas, Bolivia;
 No. 13, *Atractus tæniatus*, type from Santa Cruz de la Sierra, Bolivia;
 No. 77, *Elaps hollandi*, type from Bonda, Colombia.

The remaining species I think must be invalidated, and I set forth in the following paragraphs my reasons for so believing.

No. 35, ***Liophis elæoides*** Griffin.

No striking difference can be traced between *L. typhlus* (Linnæus), as defined by Boulenger (Cat. Snakes B. M., II, 1894, p. 138) and either the type or any of the thirteen paratypes of *L. elæoides* Griffin. So far as the coloration and markings are concerned, Griffin stated that *L. elæoides* is uniformly dark green above, its young having no nuchal band. Nevertheless, I must point out, *first*, that Boulenger himself states that adult specimens of *L. typhlus* may be uniformly olive or green above, and, *secondly*, that one may find young specimens of the latter species which show no nuchal markings. This variation, which is known to occur in the young of other species, such as *Leimadophis viridis* (Günther), *Liophis cobella* (Linnæus), *L. miliaria* (Linnæus), etc., as a rule is related to the geographical

⁴Concerning the scutellation of the head in *H. bondensis* Griffin the reader is referred to my revision of the genus *Helminthophis* Peters, published in the Proceedings of the New England Zoölogical Club, IX, 1924, p. 28, footnote, in which I stated that "Griffin, guided by the position of the eye, which of course is a character liable to show some variations due to the sliding of the head skin over the skull, was misled into taking the upper præocular of his type specimen as its ocular, and the lower præocular as the subocular."

distribution of the species. This also seems to be the case with *L. elæoides*, inasmuch as its type comes from Santa Cruz de la Sierra, a locality not far from the State of Matto Grosso, where young specimens of *L. typhlus* having no nuchal band are not at all uncommon.

Accordingly I think it to be advisable to regard *L. elæoides* Griffin as a synonym of *Leimadophis typhlus* (Linnæus).

No. 46, **Rhadinæa orina** Griffin.

The description given by Griffin was based upon five young specimens. In my opinion it is likely that either for this reason, or because Griffin did not have at hand a large series of young *Liophis miliaria* (Linnæus) for comparison, he was led to assign specific rank to these five specimens. According to my opinion all of them belong to *L. miliaria* (Linnæus), or to a local race of that species.

No. 48, **Tropidodipsas spilogaster** Griffin.

Griffin apparently was not familiar with *Sybinomorphus turgidus* (Cope) otherwise he would not have considered Nos. 42 and 47 in the Carnegie Museum as representing a new species.

Specimens of *S. turgidus* having only two or three pairs of chin-shields, instead of four pairs, as stated by Boulenger (Cat. Snakes B. M., III, 1896, p. 456) are not at all uncommon, especially in material taken in the State of São Paulo, Brazil.

The slip made by Dr. Griffin in the specific as well as the generic determination of the two specimens contained in the Carnegie Museum seems to support my own view as to the close relationship existing between the genera *Petalognathus* and *Tropidodipsas* and those which Boulenger included in the so-called family *Amblycephalidæ*. The latter group should be considered as a subfamily of the *Colubridæ*, under the name *Dipadinæ*, as I have proposed in the Proceedings of the New England Zoölogical Club, VIII, 1923, p. 95.

In short *Tropidodipsas spilogaster* Griffin is strictly synonymous with *Sybinomorphus turgidus* (Cope).

No. 56, **Clelia euprepa** Griffin.

In this case also Griffin erred both as to genus and species. The specimens, Nos. 108 and 109 in the Carnegie Museum, upon which he based his description, do not represent a new species, nor are they

related to the genus *Pseudoboa* (*Clelia*). They are undoubtedly typical specimens of *Lycognathus cervinus* (Laurenti).

No. 57, *Clelia peruviana* Griffin.

Specimen No. 377, Carnegie Museum, the type of Griffin's species, agrees with *Pseudoboa petola* (Linnæus) even in the number of gastrosteges and urosteges. It is true that Boulenger (Cat. Snakes B. M., III, 1896, p. 102) gives V. 191-222 and C. 78-126 for the latter species, but these figures refer to only forty specimens. Having examined a larger series, consisting of two hundred and thirteen specimens, contained in Brazilian as well as North American collections, I have found V. 173-231 and C. 61-130. For this reason, and also because the unique specimen of *C. peruviana* Griffin does not differ from *Pseudoboa petola* (Linnæus) in any other character, I think it advisable to regard *peruviana* as a synonym of *petola*.

No. 75, *Elaps colombianus* Griffin.

Founding his work on Boulenger's "Catalogue of the Snakes in the British Museum," which is rather confusing as regards the *Elapinae*, Griffin described Nos. 197, 198, 2031, and 2033 in the Carnegie Museum, all from Colombia, as a new species. As I have recently shown in the *Revista do Museu Paulista*, XV, pp. 13-25, *Micrurus* (*Elaps*) *corallinus* (Wied) must be divided into three subspecies, as follows: *M. corallinus corallinus* for Brazil, Argentina, Paraguay, and Peru; *M. corallinus riesii* for Trinidad and probably for Venezuela; and *M. corallinus dumerili* for Colombia and Ecuador. Therefore the above-listed specimens, which all agree with *M. corallinus*, as well as Nos. 199, 261, 341,⁵ and 1236 Carnegie Museum, which were rightly identified by Griffin himself as this species, must all be referred to *Micrurus corallinus dumerili*.

Sao Paulo, Brazil, September, 1925.

⁵In case No. 341 really came from Matto Grosso, Brazil, it should be referred to *M. corallinus corallinus*.